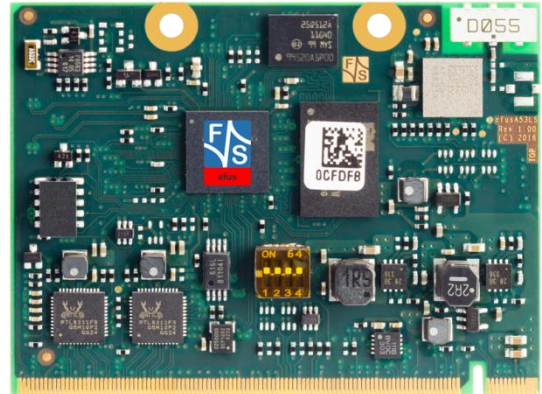


efus™ A53LS

Computer On Module with NXP QorIQ® LS1012A (Layerscape)

Characteristics

- NXP QorIQ® LS1012A (Layerscape), 64Bit Processor
ARM® Cortex®-A53 – 800MHz
- 64MB QSPI NOR Flash, 512MB DDR3 DRAM
- 2x Ethernet 10/ 100/ 1000Mbit
- 1x USB 3.0 OTG
- 1x UART
- 1x CAN (opt.)
- 1x SDIO (opt.)
- 2x I²C
- 1x SATA
- 1x SPI (opt.), 1x PCIe
- WLAN, BT2.1+EDR/ 4.0/ 4.1
- Linux (Yocto)
- 5V (2W typ.), 230Pin MXM2, 47 x 62mm
- 0°C - +70°C (-20°C - +85°C opt.)



Description

efus™ A53LS is another compact and inexpensive module in efus™ form factor. It is perfectly suited for applications with numerous interfaces in medical and industrial engineering. Along with the attribute of an easy baseboard (EasyLayout), efus™ has a size of 47x62mm only and is therefore suitable for compact housings. The low power loss of only 1 Watt (typ.) makes it easy to cool the module.

efus™ A753LS is based on a NXP Layerscape and has a Cortex®-A53 core (64 Bit CPU) with 800MHz.

Just like every other efus™ module, efus™ A53LS comes with adequate DRAM and QSPI NOR Flash. efus™ A53LS offers 2x Gigabit Ethernet and optional WLAN Dual Band/BT2.1+EDR/4.0/4.1. Another feature is the long availability to at least 2031.

The customized Linux supports all interfaces, guaranteeing an easy software development without a deeper understanding of hardware. Of course, efus™ A53LS is pin compatible to other efus™ modules.

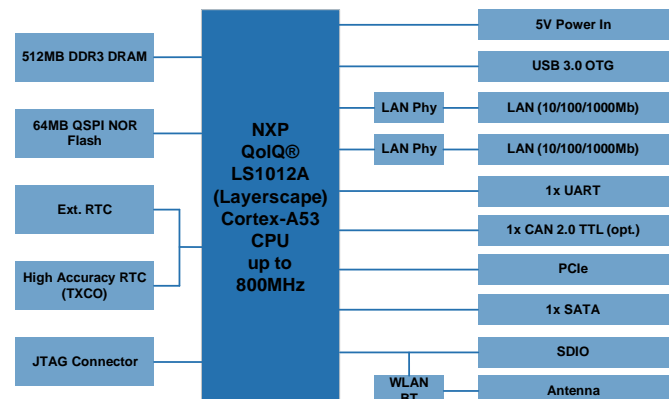
On-Board Operating System



The F&S Linux BSP (uboot, Yocto, QT, GStreamer) contains the customized kernel and all interface drivers, including Source.

A Cross Compiler Toolchain is offered to create own boot-loaders, kernels or other software. Android is also available.

Block Diagram



Starterkit

efus™ A53LS-SKIT is available in a Linux version. The SKIT includes a base board with a plugged on efus™ A53LS, a cable kit and access data to the download section (documentation and software). Schematic and EAGLE data are ready to download. Our forum with 3000+ registered customers offers example programs and it is always online for your support requests. For a fast and easy start of development, you also have the possibility to book a workshop.



efus™ stands for 20 years of experience in the RISC boards sector.

easy

starterkits
 customized operating systems
 (Linux, Android, WEC 7, WEC 2013)
 F&S Support, free of charge

functional

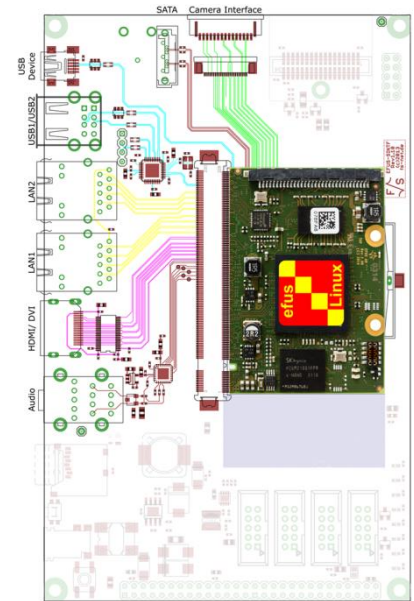
many interfaces
 expandable with wireless modules (ReDesign)
 easy base board
 based on "EasyLayout" standard

universal

visualization
 communication
 control

small

47 x 62mm only
 5V supply



Accessories

Workshop

Order no. NDCU-WS1

Four-hour workshop at F&S in Stuttgart. Our workshop will help you start working with Windows CE/ Linux and the F&S products easier.

Technical Data

Power Supply:	+5V _{DC} / ±5%
Power Consumption:	1W (typ.)
Interfaces:	2x Ethernet 10/100/1000Mb 1x Serial 1x USB3.0 OTG 1x CAN2.0 (opt.) 1xSDIO 1x SATA 1x PCIe 1x SPI
RAM:	up to 512MB DDR3L RAM
Program Memory:	QSPI NOR 64MB
Processor:	ARM Cortex®-53 Layerscape 800MHz
WLAN/BT	IEEE802.11b/g/n 2.4/5GHz BT2.1+EDR/ 4.0/ 4.1 (opt.)
Temperature Range:	0°C - +70°C , (-20°C - +85°C opt.)
Size:	47mm x 62.1mm x 11mm (lxbxd)
Weight:	about 15g

Standard Versions/ Order Notations

efusA53LS-V1-LIN

Cortex®-A53 – 800MHz, 512MB DDR RAM, 64MB QSPI NOR Flash, 2x Ethernet, USB3.0, SATA, PCIe, WLAN/BT, Linux

Minimum Order Quantity for Special Versions:

Customer-specific Software: 500 pieces

Assembly Versions: 1000 pieces

Standard Versions/ Order Notations

efusA53LS-SKIT-LIN

Starterkit with efusA53LS-V1-LIN, base board, cable kit, access data to software and documentation

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 Sater: April 2018

